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THE UNIVERSITY OF ALBERTA

EDUCATIONAL ACHIEVEMENT WITHIN THE POVERTY MATRIX

BY



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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance a Thesis entitled "Educational Achievement within the Poverty Matrix", submitted by Sybil Ulrica Sargeant in partial fulfilment of the requirements for the degree of Master of Education.

ABSTRACT

This study investigated selected components of educational achievement within the lower class learning context. The justification for such a study has been based upon an introductory survey of the failure of universal educational programs in many countries to provide an educational equality of opportunity in developing mass societies.

In order to separate the main components of educational achievement, the mass of research literature has been analyzed into three parts which correspond to the three main levels of understanding human interactional phenomena, viz. psychological, sociological and cultural. It has been thought through an application of the above characteristics to the culture of poverty that the resultant model has been unified into what has here been termed the poverty matrix.

One of the intentions of using such a unified approach to explain the components of educational achievement in poverty areas has been to avoid opposing the different categories of explanation (e.g., psychological versus cultural), but rather to understand the ways in which they reciprocally influence and modify each other. In examining educational achievement this procedure becomes very important when contrasted with traditional dichotomies such as inheritance versus environment. For if these systems of explanation are treated as open systems, more profitable attention can be paid to the ways in which they interact upon each other and together

combine to influence future developmens.

After applying this approach to an examination of educational achievement in poverty areas an important mediating component in educability has been isolated. This component has been understood as the self-concept. From the approach of the self-concept offered in this study it will be readily seen that its reciprocal relation to social role structure as well as its relative plasticity combine to make it a crucial component of educational achievement in any learning situation.

In order to translate into practical terms some implications of the theoretical conclusions to this study, a series of recommendations has been included. For the most part they have been inspired by an understanding of the critical importance of self-concept formations to effective academic achievement in poverty areas. In this case, the recommendations have included suggestions for upgrading the image and subjective appreciation of the school by parents and relatives as well as reconstructing the role relationships of the teacher with the neighbourhood community that defines the students' identities. The recommendations have also aimed at securing extra facilities for studies, and giving to capable students the opportunity to maximize the performance of their peers instead of competing against them.

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CHAPTER I

THE DEVELOPMENT OF THE STUDY

INTRODUCTION

The subject of this thesis is the role of education within the poverty matrix. What is the poverty matrix? Through the use of this term it was proposed to combine two important conceptual schemes which have enjoyed effective application in the social sciences:

1. The culture of poverty as defined by Oscar Lewis (1966: xlv-xlvi).
2. The model of an action system is adopted from Talcott Parsons (1961:38).

The relationship between these two analytic frameworks needs to be carefully specified for the purposes of this study. Whereas Parsons intended his conceptual scheme to be applied to total societies, in this thesis, it has only been applied to the particular set of social relationships that characterize poverty. In this sense, therefore, the scale of the action system has been reduced to the level of a single microcosm, that which Lewis designates "the culture of poverty". The structural composition and functional operation of this system have been examined in terms of Parson's major levels of organization.

Inasmuch as both these separate theoretical frameworks have intricate and extensive implications, it is evident that any practical synthesis must be severely limited by selectivity. The actual limitations adopted in this paper will be explicated at a later point. At this stage it can be said that many previous analyses of poverty have emphasized the dominance of basic socio-economic structural variables, such as institutional and ecological, on human attitudes and value orientations. Particularly, in educational research this type of analysis has been typical of much recent work. It has been the purpose here, however, to partially reverse established research trends and elevate personality and cultural factors to the status of independent variables, examining how value orientations impinge upon structure, as well as deriving from structure. In this way something of a fresh vision may be revealed in the culture of poverty, for poverty may be analyzed as an action system just as any other.

The application of the action system to the culture of poverty provides the broad outlines of the poverty matrix--the details of which may be later established, and it is within this framework that the relative role of education is examined. In order that the relative role of education may be clearly defined a brief account has been prepared of the growth and extension of universal education in several advanced industrial nations of the world, as well as in a few of the former colonies of some of these developed nations. For the problems of poverty and inequality become most acute

only when social disparities are visible contradictions of an equalitarian educational policy. Both in the United States and Great Britain tensions in educational systems may be analyzable in these terms.

Universal education has become a principle written into most national constitutions around the world today. Simon (1960) in his *Historical Studies of British Education*, stated:

With the Education Act of 1870, reorganization of the country's education system was completed in the light of the new conditions following the extension of the franchise. . . . But events had forced the pace and mass working-class pressure contributed to ensuring that at least the first foundations of a universal system were laid--that education was no longer a charity but a right.

Again, the third Report of a Commission (Simon, 1960) appointed to enquire into the working of the Elementary Education Acts, England and Wales, affirmed:

We believe that the children of the poor ought to be able to rise from the Elementary to the Secondary Schools, and on to the Universities . . . all educational facilities ought to be equal and open all classes. . . . We feel that it is necessary to have all the roads to education open, free and unfettered to the people.

Later, Smith (1931) made the following report:

A further change in the finance of Elementary Education was enacted by the Act of 1891, which gave parents the right to demand free education for their children.

These revisions coming before the 1944 British Education Act laid the foundations for a Universal Education, not only in Britain but also in her colonies, including Guyana and the British West Indies, British East Asia, and Colonial Africa.

The report of 1922 on African Education (Scalan, 1964), stressed the change in policy of the European Colonial powers towards the realization of Universal Education in Western, Southern and Equatorial Africa. Further examples of constitutional clauses with regard to universal education are spelled out by the British North American Act (1867) Section 93 for Canada, which gave to the Canadian Provinces the legal right to the education of their people. The American Declaration of Independence also pays tribute to the importance of universal education and the equality of opportunity for all.

The principle of universal education was similarly replicated in the U.S.S.R. The third principle of the U.S.S.R. system of Public Education states:

The school is universal, free and accessible to all. According to Deineko, in the U.S.S.R., there are no restrictions (racial, national, etc.) to entering any school including schools of higher learning. The tuition in all general education higher and special secondary schools is free.

In modern industrial states, this general principle has evolved through revisions, such as the 1944 Education Act in Great Britain creating the Binary Education System, and raising the school-leaving age from fifteen to sixteen years, or the 1964 U.S. Title IV of the Civil Rights Act to desegregate the public school system (NACCD, 1968). However, it has grown steadily more apparent that many of these legislative reforms have not accomplished what they intended to accomplish: namely, the radical equalization of educational opportunities and their democratic distribution within a

mass society. On the contrary, much post-war research conducted on the changing pattern of British education has tended to confirm the impression that large-scale socio-economic and sub-cultural disparities continue to exist within the national education system. (Newsom Report, 1963) and (Ploweden Report, 1967). In the same way the now proliferating reports from the racial and national ghettos of the United States, clearly suggest that both equalitarian rhetoric and legislation have failed to create an educational system based on an actual equalization of educational opportunity within a mass society (NACCD, 1968).

Coleman (1968) has provided an historical survey of the relative advances made in establishing conditions of educational opportunity, as well as the residual tensions that persist in differentiated educational practice today. His report tends to confirm the impression that achievement factors are not randomly generated in school children or even in their family milieux, but on the contrary they remain the dominant responsibility of educational institutions.

The implication of the most recent concept as I have described it, lies with the educational institution, not with the child.

It is important that an analytic perspective of these problems remains firmly placed within the context of the dominant social system. For the objective factors impeding the success of the earlier attempts at institutional modernization are inextricably bound up with the realities of class-

society. Insofar as educational reform is proposed under these controlling social conditions, such reform must inevitably veer towards therapeutic and piece-meal institutional reconstructions dependent for radical changes upon the exigencies of major political movements within the large-scale social system. In spite of these dimensions, however, the problems of educationists within the context of environmentally deprived community schools require urgent practical attention and research. In considering how to delimit the population of school children for the purposes of our research project, it was proposed to follow the example of the ESEA (1965) which is to profile and restrict the range of investigation between the years of seven and seventeen.

As an introduction to the general area of environmental deprivation and the learning ability of children, it was useful to consider the systematic provisions within the education system made for other special status students. Lord and Inenberg (1964), distinguished three groups of pupils for whom special school instruction is required:

1. Mental (retarded or gifted).
2. Physical (crippled, visually impaired, hearing impaired, speech handicapped).
3. Emotionally and/or socially handicapped.

Within an increasing literature, Paschal, (1960), described the progress made in education programs for the "gifted" or "able" children. Overall policies included

academic segregation and accelerated coursework, all of which are designed to secure earlier admission to higher education establishments.

Besides the protective streaming of children within the school system there exist many other types of remedial-learning institutions for special status students. Some of the establishments such as schools for the blind or the deaf are adaptive in terms of their program-orientations; they seek to enable children to adapt as effectively as possible to the conditions of permanent physical handicap. The other broad category of special status learning institutions may be described as therapeutic, in that their institutional objectives centre not on the adaptation, but on the total or partial rehabilitation of children to a former status. Many behavioural problems fall into this definition, for example, the reformatories for delinquent and deviant offenders, as well as non-criminal forms of social and institutional maladjustment. At the same time, many institutions, perhaps most of them, do not concentrate exclusively upon either of the ideal functions of adaptation or therapy, but rather achieve a comprehensive program incorporating both these objectives.

The important point to be made in this brief resumé of exceptional educational institutions is that for most of special statuses involved, there exist independent and well established resources both human and material, to support the rehabilitation of deprived children. However, it remains

generally true that such special remedial facilities are only minimally made available to environmentally deprived children, and that the formation of special programs and the recruitment and training of specialist personnel remains at a primitive stage of development. This is made clear in much of the literature on specialized learning institutions where environmental deprivation is generally neglected as a specific form of exceptionality, as is reported in Conner, (1966).

Jensen (1969) states that the poor are automatically environmentally deprived. It is in this sense that the two terms are used synonymously in this thesis. The importance of a systematic approach to the problems of environmental deprivation has resulted in a piecemeal and partial perspective towards the formation of rehabilitation programs. The tacit assumption has persisted that whilst mentally and physically handicapped students are legitimate areas of therapeutic concern, the grosser environmental disparities within the education system are more naturally an expression of differential learning capacities grounded in family background and individual initiative. Such proposals as have been recommended are frequently defined not in terms of the social rights of the individuals and communities (as for example the physically handicapped), but are rather intended as ameliorative approaches to the more extreme manifestation of the problem. In short, the discussion, and even more, the

practice of restructuring impaired educational environments has moved only marginally from the early Victorian charitable platitudes that characterized the start of educational reform.

Inasmuch as some of the assumptions of the charitable reform of educational systems remain regressive and irrelevant to present social contexts, this thesis has taken as its starting point a systematic analysis of program alternatives for mass education achievement within the poverty matrix.

The Problem

Because lower class children suffer from the disabilities of relatively impoverished school systems, they are frequently exposed to second-rate and inadequate educational environments. However, even if these schools are appropriately upgraded there still remain many problems embedded in the particular social class and subcultural background of the child. Negligence of these factors has led to varying degrees of ethnocentrism in teaching attitudes and practices, operating in socially foreign conditions. It is the contention of this thesis that such social influences that the child brings to the classroom cannot be unilaterally condemned--rather they should be understood and their implication for the learning process be objectively evaluated.

The purpose of this thesis was to attempt to investigate determinants of educational achievement, and their relationship to the lower-class learning context.

Significance of the Study

The significance of the study derives from current research into the problems of lower-class performance in education, which suggest improvement through the reformation and expansion of social (school) systems. This research directs its attention to long-term improvement in the educational conditions of lower-class people; and in this sense it is important to understand the role of social, psychological and culturo-economic factors in educational performance. In attempting such an analysis, it is hoped that a more realistic approach in education for the poor might be sought, and thereby provide for improvement in the teaching-learning situation which prevails within this context.

Research Questions

The major questions considered in the study are:

1. What are the components of educational achievement within the lower-class learning context?
2. Are there any systematic relationships in the components of achievement derived directly from social class levels?
3. Are there programs that might be considered for the environmentally deprived?

CHAPTER II

METHOD OF DATA COLLECTION AND STRUCTURE OF INVESTIGATION

Method of Data Collection

The study will make use of the Library Research Method. In this connection three major variables to be considered are:

1. Personality
2. Society
3. Culture

Rationale

In order to overcome a traditional problem of analysis in social science (Education), namely the distinction between the whole and the part, holism and elementarism, it was decided to use what is called the Action Model. The use of this model lies in its practical ability to balance different levels of analysis without succumbing to the determinism or the reductionism inherent in the traditional theories of reality. Insofar as these three components of the model are treated in a systematic way, they are recognized as different levels of analysis of a single systems model:

1. Personality System
2. Social System
3. Cultural System

It is in the above context that this paper has examined education achievement within the poverty matrix. In so doing the personality system is subdivided into the following areas:

1. Self-conception
2. Intelligence

The Social System comprises:

1. Effects of occupation and income
2. Reference groups

The cultural system is dealt with from the points of view of:

1. Norms
2. Goals

Limitations of the Study

A study of this nature must be limited under the three broad headings of personality, social and cultural systems; many more subdivisions might be thought of, but by so doing this study would far exceed the available resources of time and money.

The age limit of the school population is another important factor. The age range is five to seventeen years, since this age group represents those children entering elementary schools, and those that have left or are about to leave secondary schools.

The study is also of a general nature with the hope that it might be useful not only in a Canadian or Guyanese context, but that certain aspects might be applicable to

problems of education for the poor in any societal context.

II. DEFINITIONS OF TERMS

Educational Achievement: The term is defined operationally as a mean standard of academic performance, by which those who perform higher than the mean can be called over-achievers, those lower than the mean underachievers, and those who conform to the mean, normal achievers when viewed statistically.

Poverty Matrix: In mineralogy the term matrix is a mass in which a crystal mineral or fossil is embedded. In mathematics it is an arrangement of numbers or symbols in a rectangular or square figure. In this study poverty matrix indicates that the phenomena usually associated with poverty must be analyzed in a systematic and operationable framework. In this way the policy implications for educational practice may be logically derived from these categories. For our purposes the area, or culture of poverty is treated as a system of action with three interpenetrating levels of analysis, as previously stated.

1. The Personality System
2. The Social System
3. The Cultural System

It is through these dimensions that the structure and function of poverty are examined in specific relations to its effects upon the status of education and the general educa-

bility of children. It is this complex of factors that we have designated as the poverty matrix.

Universal Education

This concept refers to education which is made available through the state apparatus of a country to all members of the society, so that equality of educational opportunity might be realized.

Personality System: This term is used in this paper to mean those attributes of the individual personality that govern social functioning. Of these attributes selective emphasis is placed on intelligence factors, motivation and self-conception.

Self-Conception: The concept refers to the individual's own ratings of his self. This personal identity or self is not innate, but represents a developmental formation produced by means of interaction from infancy onward, with his physical and social environment.

Intelligence: This refers to intellectual ability which manifests itself by means of an interaction process between genetic endowment and environmental experience. It is not directly measureable, but is inferred from the results of tests which measure the ability to reproduce what has already been learned instead of the ability to elicit new responses.

Social System: This may be defined as patterns and units of interaction, where interaction itself means social action.

Occupation: This may be defined as a relatively continuous pattern of activity that provides the worker with a livelihood and at the same time defines his general social status. It emerges whenever division of labour is associated with money economy, labour, and commodity markets.

Income: This is a term that indicates the earnings the worker receives from his employer in return for his occupational duties.

Reference Groups: Gould and Kolb (1964: 580) define reference group as denoting "a social group with which an individual feels identified and to which he aspires to relate his identify."

Cultural System: Lundberg, Schrag Larson and Catton (1968: 752), define the term as "a system of socially acquired and transmitted standards of judgment, belief, and conduct, as well as the social and material products of the resulting conventional patterns of behaviour".

Norms: These are rules or patterns for action. Operationally it is used to refer to standards by which behaviour is judged and approved. In this sense it is a cultural or shared definition of desirable behaviour.

Goals: These are objects of value to which individuals or groups aspire. Kluckhohn (1959: 395) defines a value as:

. . . a conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable which influences the selection from available modes, means and ends of action.

CHAPTER III

REVIEW OF RELATED LITERATURE

Intelligence Factors

Much current literature is replete with evidence to show that intelligence, is the chief factor influencing educability in children. This paper considers some of the articles that are most relevant to this discussion. As early as 1908 when Binet was constructing an instrument to measure intelligence, he recognized that intelligence depended considerably upon sociological condition. He felt that results for his measuring scale depended:

First on the intelligence pure and single; second on extra-scholastic acquisition capable of being gained precociously; third on scholastic acquisitiveness made at a fixed date; fourth on acquisitions relative to language and vocabulary, which are at once scholastic and extra-scholastic, depending partly upon the family circumstances. (Binet 1916:259)

Three years later, he elaborated on certain discrepancies he found between his own test results and those of two Belgian Educators Decroly and Degand in one of the first practical uses of the Binet-Simon Scale. Decroly and Degand had used the scale on children in a well-to-do private school in Brussels, while Binet's subjects were of lower-middle-class in Paris. A mean mental age difference of 18 months have been found between the two groups, and this difference Binet ascribed to the fact that social status must be closely

correlated with mentality. It is evident then, that Binet himself would not account for I.Q. differences solely on heredity, for he was well aware of class differences in both physical and educational aptitude (p. 318). He, however, felt that his scale was a fair measure of intelligence, and continued to regard it as such, despite the item analysis he conducted on the 1911 scale. Six of thirteen tests (which showed most discrimination between working class and upper-class samples) were language items. His interpretation of social class differences therefore, in terms of superior language environment appears to be justified, but he has failed to apply the importance of these findings to the validity of his intelligence test scale for all sections of the population. Even with later changes the Binet scale is still loaded with verbal items that continue to discriminate between the social classes.

Ada Hart Arlitt (1921:1) using the Stanford revision of the Binet Tests on 304 children comprising of 169 whites, 68 Italians and 67 negroes found that when the group was divided on racial lines alone, the median I.Q. showed white 106.5, Italians 84.3 and Negroes 83.4. When the children were compared according to social class the results of the median were: white--92 points, or 8.6 above the negroes and 7.7 above the Italians. The study also showed that 90% of the children of white parentage were from families with average or superior social status, whereas 88.2% of Italians

and negroes were from inferior or very inferior social status. Arlitt in conclusion, neglected to consider the implications of social status for I.Q. differences, but appeared to have based her conclusions on differences shown when the group was divided on racial lines only. If she considered the vast differences seen in social status, then implicit in her conclusions is that low social status people by inheritance have low intelligence quotients.

In 1923, Terman's (1925) committee of the National Society for the Study of Education looked into the relative effects of heredity and environment on intelligence. As a result two studies emerged--Hollinsworth and Cobb (1928: p. 5) studied two groups of children with average intelligence quotients of 164 and 145 respectively. They predicted that if home and school conditions were held constant, then both groups would not differ from each other unless intellect, as measured, was the chief determinant of such a difference. They found that despite equal opportunity, children of very superior intelligence scored higher on achievement tests than those with superior intelligence. They interpreted their findings as hereditary factors being most important. In the second study done by Heilman (1928), he posed as his problem, the determination of relative influence upon scholastic achievement, of mental age, school attendance and socio-economic status of the home. He found that less than 13 per cent of the variation in Educational

Age, was due to school training, 1 per cent to socio-economic status and almost 70 per cent of the variation was due to heredity. He concluded that, "intellectual endowment has by far the most powerful influence in determining differences in achievement." (p. 64)

Cattell (1937) predicted a "galloping plunge toward intellectual bankruptcy." This prediction was based on the fact that he multiplied the number of people at each I.Q. level by each level's reproduction rate, and estimated the I.Q. of the next generation, by a computation on the new mean derived. He then estimated a decrease of a little over 3 points per generation or about 1 point a decade. This galloping downward plunge in intellect has been consistently falsified, however, by rising intelligence quotients in populations where children of a certain age have undergone test-retests at periods of a decade or more.

Later, Cattell (1949) studied 10-year-old children living in Leicestershire, England, and made a comparison with 10 year olds that lived in the same city in 1936. He found an increase of 1.28 points. Although this is a fairly small increase it was significant since Cattell had predicted a decrease. Other test-retest studies including those of S. Smith, Lester Wheeler, Frank Finch conducted after Cattell's publication found increases varying from 10 to 20 points.

More recently, Arthur Jensen (1969:1-123) cited numerous

studies including Cattell's to support his hypothesis that I.Q. differences in the disadvantaged youth must be attributed chiefly to heredity, thereby alleging genetic differences. His contribution has interested Howarth (1969:15) who in a footnote notes.

Just as there are inbred behavioural differences in mouse strains, so there is a wealth of evidence for racial differences in the distribution of intelligence when SES is allowed for, e.g., Jews are higher than the average white norms; this does Not mean that "All Jews are brighter than whites; it refers to population characteristics, to the mean of a distribution. The general scientific agreement is that 'intelligence' is 80% inherited. Jensen (Harvard Educational Review, 1969, Vol. 39, No. 1, pp. 1-123) in a famous article has shown evidence that the I.Q. of U.S. Negroes is 15 points lower than whites. This means that only 16% of negroes are above the average intelligence of the U.S. white population.

Jensen (September 28, 1970) at the University of Alberta rejected the above interpretation of his findings offered by Howarth and termed the quotation as being a "vulgarization." The major trends in the literature reviewed thus far seem to indicate that intelligence is primarily an inherited factor, and is receptive only to minor modifications of environmental pressure.

However, the whole question of the inherited basis of intelligence has been challenged with the introduction of new findings into this area of research. Cattell (1940:162) for example, pointed out that conventional verbal intelligence tests can shed very little light on controversial issues as comparative mental ability of individuals among races, classes or generations:

It is logically possible for Neff to argue that there are no social status differences in innate intelligence, or for Klineberg to argue that even the most biologically distant racial groups do not differ in average native ability, in the face of the general sense of all the direct and indirect evidence to the contrary.

Cattell (1944) attempted to remedy the situation with the implementation of a "culture-Free" test of "g" in three scales to cover children from four years of age to adulthood. The original test was non-verbal, and composed of perceptual items which previous investigators had shown to be useful in eliminating culture bias in tests. His test modality was, however, criticised as being too narrow in scope to sample a complex mental function adequately. Other psychologists, especially a Chicago group, looked into the matter of culture bias and tests. Havighurst (1951:21) for example, after reviewing the studies of Warner, Davis and others which dealt with class differences in child upbringing, vocabulary, family life, and attitude in education concluded:

. . . that middle and lower class children bring to the intelligence test situation widely disparate cultural experiences, by virtue of their social-class experience and that middle-class children get more out of themselves in the ordinary school test situation than do lower class children.

Therefore, the conventional intelligence test is likely to cause problems whereby language and content are more familiar to particular sections of society than to others.

Eells' (1951) findings supported the contention that the bias in test items exists, and that it tends to favour

upper middle-class children. Studies done by Havighurst and Janke (1944) and later by Havighurst and Breese (1947), showed significant differences between classes on the majority on the tests and especially between extreme classes.

Eells and Davis (1953) being aware of culture bias that continued to exist in tests constructed a test known as the Davis-Eells Games. This test is non-verbal like Cattell's, but is also oral and depends solely upon pictorial items. Despite the fact that evaluators of the tests have found Cattell's to be more reliable than that of Eells-Davis, it is apparent from both studies that environmental factors which will be discussed in another section of this study are more important in some intelligence tests than in others, and this fact should be taken into account by those administering the tests.

Self-Concept

It is realized that innate factors may set limits on the ability to learn, but it is also recognized that very many people have not been able to achieve anywhere near to their innate capacity level. This section of the literature review investigates the student's self-concept of his ability as a learner in an effort to find out how much this factor may functionally prevent him from achieving at his maximum level of learning capacity.

Towards the beginning of the century Charles Horton Cooley (1902) made a conscious effort to find out how the

"self" could be discovered by examining the "I". He concluded that there was a differentiation of self and other, but this took place within the mind. George Mead (1934) however, although he appreciated Cooley's work, saw "mind" as arising through communication. He postulated that voluntary conduct was performed in a sequence of adjustments, during which time an individual responded to himself as well as to the rest of his perceptual field. He therefore studied the "I-Me" concept by which the "me" was the object one formed of one's self, and the "I" the reaction of the unique individual to the historical situation as he perceived it. For Mead, it was the interaction of the "I" and "me" that constituted human behaviour. He saw man as inextricably involved in groups, but at the same time he stressed man's individuality, for each person though a product of society retained his distinctiveness, since he incorporated self from a unique standpoint.

Although Mead lectured extensively on the above mentioned subject he did not publish extensively. Before his 1934 work, however, several studies were advanced to show that learning was negatively or positively affected by personality factors other than intelligence. Regensburg (1931) compared a group of academically successful children with a group of academically unsuccessful ones, and found, that the academically successful had more compensatory ego mechanisms than the unsuccessful who showed more protective

ego mechanisms. Bird (1927:56-59) and later Sherman (1939:132-133) among others, noted some specific defence mechanisms used by low achievers. These included negativism, stubbornness, withdrawal, passivity and day-dreaming.

Later on, other studies investigating educability and personality factors attended more directly to the concept of self. Conklin (1940), found that unsuccessful children had histories of less desirable relations with their families and with their companions. They suffered more from cruel and ineffectual punishments, a situation that could easily make the children see themselves as unloved and unlovable. Sylvester and Kunst (1943:69-76) tried to find out why children did not see themselves as potential learners. They reported the results of 13 college children 8-13 for reading and developed a theory of inhibition of the exploratory function. Lecky (1945) found a causal relationship existing between learning problems and the concept of self; that the preservation of one's perception of self was the prime motive in all behaviour. Self-consistency, he felt, was necessary both to perceive and to maintain one's self-identity; so that even if a person believed that he had a bad, stupid or weak "self", he would adhere to all perceptions that bolster this image, and refuse to accept any others. Jersild (1952:114) put forward a similar concept. He found that when an individual resisted learning which might be beneficial to himself, he was, in fact, trying to

protect an unhealthy condition. But in a broader sense, he was trying to safeguard the picture of self, or the illusions concerning himself which he built up and which gave him much trouble. Sullivan (1953) paralleled the concepts of both Lecky and Jerslid. He found that the "me" concept may be distressing or even humiliating, but it was necessary for the self to hold everything that reinforced it, and would call "not me" anything that did not fit into a consistent picture of self. Roth (1959:265-281) concluded that with all things being equal those persons who achieved chose to do so and those who did not, chose to be non-achievers.

More recently, further evidence have been advanced to show that others could and do influence the self. Rogers (1960:1-30) working in a psychotherapeutic laboratory found that given a therapeutic climate of warmth, acceptance and empathic understanding his clients progressed from a form of self-alienation toward one of self-actualization. In the following year (Rogers 1961:27-45) his research findings supported the statement that the more the client perceived the therapist as real or genuine, as being empathic, and having an unconditioned regard for him the more the client moved away from a static, unfeeling, fixed and impersonal kinds of functioning toward a way of functioning that was characterized by a fluid, changing exceptional experience of differentiated personal feelings. Although Roger's subjects were not school children, the studies point directly

to the consequence of acceptable treatment that may effect changes in persons' self-concepts, and so enable them to act according to the dictates of the new self.

Videbeck (1960:351-359) like Mead, in an experiment, found that evaluative reactions of others played a significant role in learning processes. This finding like those of Rogers are important for the consideration of teacher-child relationships and kinds of learning possibilities. Bordeau, Dales and Conner (1963:413-418) tested 95 female 4-H club members from 46 countries in Florida to evaluate the relationship of self-concept to 4-H club leadership. They found that the leaders tended to have a better concept of self than did non-leaders, they also rated themselves as being more intelligent, dependable and with more initiative, and ranked higher in prestige. Yet the two groups did not differ significantly in their private self conceptions. This study, although it deals with persons outside the school situation, has importance for our present study on the influence of self-conception on educability.

Blesdoe (1964:55-58) studied 271, fourth and sixth grade boys and girls from 4 schools of Clarke county, Georgia. He compared the self-conceptions for the four groups using the California test of mental maturity I.Q., California Achievement Test scores.

Interest inventory scores and children's manifest anxiety scores were derived. No appreciable differences were

found between the sexes at the separate grade levels, but girls in both grades scored significantly higher than boys in corresponding grades. Self-concept positively correlated with measures of intelligence and achievement, but only in boys were the correlations significant. Self-concept and anxiety had significant negative correlations for both groups of boys and for fourth grade girls, whereas significant positive correlations between self-concept and interests were found for fourth grade girls. This study parallels Earls' (1967:1205-A) to a great extent, when he tried to determine the importance of self "as a non-intellectual predictor of achievement which did not parallel student's level of intelligence."

In another interesting study, Chambliss (1964:108-112) assessed the prevalence of the negative self in two samples of college students and stated that the assumption of persons having negative self-concepts might be totally incorrect, and at best described only a very small portion of the population. Dworkin (1965:214-224) found that native-born Mexican American considered themselves to be relatively socially and economically disadvantaged compared to Anglo-Americans, while the foreign-born Mexican Americans felt that when they were compared with their peers in Mexico, they were of a relative social economic disadvantage. This study is particularly important not only for the reference group theory it afforded, but also for the social relativism

expressed. Ziller, Long, Ramana and Reddy (1968:315-330) found that within a framework of self--other concepts, Asian Indians in comparison with American adolescents showed higher self-esteem, higher social interest, higher identification with significant others and higher self-centrality.

More importantly, however, are studies done in the same year by Sarbin (1968) and Stryker (1968). Sarbin insisted that self-structure is grounded in social role structures and that neither aspect can be meaningfully examined in isolation. Stryker extended this formulation into an elaboration of an "identity salience model", and it is this which forms the basis of an understanding of the self-concept. For Stryker, the self-concept as a complex whole may be conceptually fragmented into a series of identities that derive from particular role relationships which are entered into at any given time.

In conclusion, it was found that each of the above investigators used a different frame of reference, and each contributed a theory that helps in the analysis of self-concept as a major contributory factor in learning processes.

A synthesis of the theories present a vivid picture of the low achiever as a child whose position is defined as helpless and inadequate. Once the child accepts this definition of himself, he cannot picture himself as achieving anything consequential, but he must always be on the defensive

to protect and maintain the perceived image he has formed of himself.

Effects of Socio-Economic Status (Occupation and Income)

The term socio-economic status is usually broadly defined in the literature on poverty, and so it has been easier to operationalize it within the limits of occupation and income. The review of the literature in this section deals with those aspects that are relevant to our discussion in terms of the above distinction.

Burt (1961:55-69), postulated that although the events within the brain seem to provide the "necessary condition for conscious activities", they can in no way be considered the "sole and sufficient conditions". The other conditions "must be sought in disproportional properties--cognitive, affective and conative, of the hypothetical physical component". An "empirical duality of brain and consciousness is compatible "with a metaphysical identify of matter and mind". Therefore Burt himself a geneticist, acknowledges that environmental factors are contributory to man's conscious activity. Since learning is a conscious activity of man, then it is reasonable to state that Burt acknowledges the importance of environmental factors to learning.

Occupation and income two closely related phenomena with which this section is largely concerned affect the educability of children. Neff (1938:727-753) contended that

although children at birth may be differentially innately endowed (a still unsettled question), there has not yet been any proof that the social status of parents has anything to do with the infant's native endowment. He added that the possibility of a positive relationship developing later in life can hardly be denied; in reviewing 30 studies all of which showed that "low cultural environment tends to depress I.Q. approximately to the degree agreed to as characteristic of labourers' children, and that a high environment raises I.Q. correspondingly". He attributed solely to environmental factors, the 20 point mean difference in I.Q. which was found to exist between children of highest and lowest statuses.

Kahl's study (1953:186-203) in part corroborates Neffs' findings on social status of parents and the infants' native endowment. He found that at the very early grades social status of parents was unimportant but took effect from grade 4 with increasing effect as each year passed. He also found that by the time the boys make their choice among the separate curricula at the ninth grade level, those from low status parents both performed and aspired to much lower levels than those of equal intelligence from the highest status families despite their similar accomplishments at the early grades; those from the high socio-economic homes planned a college career, whereas those from low status homes did not aspire to higher education. He attributed his findings to parental pressure. This does not mean that the boys have

been pressurized into not planning college careers, but it may simply mean that the poor boys have realized the value of a college career, but simply reject it because their class work has deteriorated due to the pressures of poverty, and they cannot see improvement either in future monetary gains or in class-work.

Hohol (1955) using the Dominion Bureau of Statistics, and also carrying out an empirical research in Alberta schools, found that 57% urban and 63% rural children from 15-19 years of age were not attending schools; this compared favourably with the 1946 percentage school drop-outs in the United States. He also found that although Alberta had the highest survival rate, it was 50 per 1,000 whereas the index rate for Canada was 182 per 1,000. He attributed this finding to "straitened financial circumstances to withdraw for work", and asserted that low intelligence has been over-rated as a primary drawback to learning. Allison Davis (1948) made the important point that it was necessary for the teacher to discover the reference points from which the child starts. He must learn much about the cultural environment as well as of his cultural motivation if he is to help guide the child to new learning effectively.

In a study Morris, Pestaner and Nelson (1975:74-79), sampling an all-caucasian group of 5th grade boys and girls of industrial suburbs of Alameda county of California,

found that economic forces affect children in schools, since relocation and modification in the aspiration of the breadwinner motivate the nuclear family group. Both social and geographic mobility characterizing family life at the present time contribute to the increase in emotional disturbance evident in children's behaviour. This study corroborates the findings of subsequent and most recent studies such as Miller (1958:5-19), Reissman (1962), Harrington (1962), Lewis (1966) and others who emphasize the transmission of the culture of poverty from the old to the young. In particular Lewis (Ibid., p. XLVI) stated that:

People with a culture of poverty are aware of middle class values, talk about them and even claim some of them as their own, but on the whole they do not live by them. Thus it is important to distinguish between what they say and what they do.

Liebow (1967:1-260) in an extensive study among lower class Blacks at Tally's Corner, in Washington, found that his subjects had middle-class aspirations, but rejected them in practice because of inability to achieve them through poverty. He cited an example that the men claimed they preferred to have several women rather than marry one, because of their dexterity in sexual relationships; that one woman was incapable of coping with them. Liebow through participant observation discovered that through non-marital sexual relationships, the men were able to escape the legal obligation of marriage and family support. This finding is substantiated by that of Lewis.

In an effort at upgrading poverty areas, many writers,

including Jacobs (1961), Sexton (1965) have emphasized the beneficial effects of skilled manpower investments in poor communities, in terms of providing community leadership and paving the way for a general mobilization of local people.

Riessman (1966:32) suggested the use of students as helpers in many ways. As an example he stated that disadvantaged 6th grade pupils in Flint, Michigan, were experiencing reading difficulties. After they were assigned to tutor a grade four group who were also experiencing the same difficulties, the 4th graders made considerable progress while the 6th graders also learned from their teaching experience. He also felt that it was an important possibility that tutors considered teaching as career because of their experience as helpers. This suggestion is in keeping with the pupil-teacher system that existed and still exists in the Caribbean area (see Appendix A), on a much more elaborate scale, and which is being practised on a smaller basis in some areas in Alberta (see Appendix B).

In concluding this section there appears a similar convergence among different theorists in this area on the significant status of socio-economic variables although the relative priority of these variables remains open to differential interpretation.

Reference Groups

Social scientists have always operated on the basic principles that an individual's attitudes and conduct are

shaped by the group in which he has membership, and that self-evaluation and related feelings and patterns of behaviour flow from the individual's location in the particular group within a social hierarchy. While there is abundant evidence to support these principles, some unreliability often arises, in the face of contradictory examples; but these contradictory examples are insufficient to invalidate the general principles. This section of the literature review examines the concept of reference groups to see the part it plays in children's learning.

Hyman (1942) first advanced the term as he sought to understand the ways in which individuals ranked themselves. Research evidence as shown by Whyte (1943), has indicated that an individual's levels of aspiration partly as a result of his personal experience, are related to the performance of his reference groups and their aspirations. He reported that Frank, a member of "The Nortons", a street gang which he studied was a very good bowler but when bowling with this reference group among whom his general status was relatively low, his scores dropped immensely. The focus of a large portion of the book is on the influence of the peer group upon members. Morton Deutsch (1954) among other researchers into aspiration levels and peer group influence has shown why lower classes in general are less striving and less hopeful for their future than their middle class counterparts.

Shibutani (1955:562-569) following up on Hyman's work, stated that "the definition of reference group should be restricted to . . . that group whose perspective constitutes the frame of reference of the actor," since it will facilitate the study of selective perception, differentiated associations and loyalties. In the same year (1955), Turner advanced a study on reference groups of future-oriented men, and described the reference group as serving the purpose of determining whether an individual values the level of behaviour in any group as a good enough measure in assessing his own achievement. He further stated that the future orientation may be characteristic of a particular stage in life, but is probably more specifically a function of high ambition such as that found among college men.

Other studies have shown that when an individual has no direct experience in an activity he tends to set as goals for himself what he perceives as actual achievements of his reference groups. Chapman and Volkmann (1956) for example, in an experiment with university students gave a test to four groups and asked them to forecast their scores. One group forecast scores lower than those they were told were scores of professors (a high prestige group), the second group predicted scores higher than those they were told were scored by workers (a low prestige group), and a third group forecast scores the same as those they were told were made by a group similar to their own student status.

Zimmerman, Claire and Bauer, (1956:238-248) hypothesized that, "the imagined attitudes of prospective audiences can affect what a person will remember of new incoming material", and that such memory can be affected by attitude toward the material.

The above hypothesis has direct significance for teaching and learning, and Cagan (1958) has demonstrated this significance. In his investigation of teachers' behaviour and the productive behaviour of their pupils, it was revealed that the children's perception of their teachers and the teachers' estimates of their pupils' work were significantly related to the pupils' estimates of their own work. His work is supported by Burnstein (1966) and is closely related to the findings of Zander, Meadow and Efron (1965). They experimented with 11th and 12th grade boys who were divided into 48 teams to perform 10 tasks and observed by 48 groups of observers. The expectations of the observers were compared with the group aspirations and among other things it was revealed that the performers used group aspirations as standards for evaluating success or failure of team performance most often when they were not meeting expectations. Sherif and Sherif (1964:180) made the important point that persons can and do have more than one reference group, and that this is particularly true of modern urban life. An example is given of an adolescent as having school, church and peer reference groups. These groups include individuals

whose opinions make a difference for him, whose standards and goals are his, and with them he wants to be counted as an individual.

Conclusion

The impact of reference groups on individual experience and behaviour is evidently considerable, and as such, must be taken into account when analyzing the complex of socially relevant factors that continue to make up the fully socialized individual. The practical application of reference-group theory will be later explored in the recommendation of this thesis.

Norms

The concept of norm has been widely used by social scientists in understanding human behaviour, but despite the many "normative" explanations the conceptual treatment of normative systems remains unsatisfactory. Much research dealing with norms and its effects on the individual in the learning situation has not been explored; the literature review of this section will concentrate on those studies dealing with norms which may contribute importantly to the subject matter of this study.

The normative system in a culture of poverty is different from that found in the larger society, and it is this difference which constitutes the problem faced by educators who are middle-class oriented, (Davis 1941, Havighurst and Davis 1943, Warner 1944, Neugarten 1946), and who are

usually unaware of these differences. Allison Davis (1948: 11) pointed out:

Because the slum individual usually is responding to a different physical, economic and cultural reality from that in which the middle-class individual is trained, the slum individual's habits and values must also be different if they are to be realistic. The behaviour which we regard as "delinquent" or "shiftless" or "unmotivated" in slum groups is usually perfectly realistic, adaptive, and--in slum life--respectable response to reality.

Davis' findings is similar to that of Oscar Lewis (1959:16) who stated:

Poverty becomes a dynamic factor which affects participation in the larger national culture and creates a subculture of its own. One can speak of the culture of the poor, for it has its own modalities and distinctive social and psychological consequences for its members.

It is this different normative system which manifests itself in poverty areas that must be understood by teachers from more affluent social systems who go into poverty areas to teach young people. These problems cannot be fully understood, however, by travelling teachers who enter the school district in the morning and leave in the afternoon after the day's job of administering a set program. Kvaraceus (1959) claimed that mere contact with the lower classes does not guarantee an understanding of the life-style of the poor by a person with middle class status. He further pointed out that the situation is not only true in education, but also can be generalized to other professionals who have occasion to work with lower class youth. Havighurst (1964) recommended

that college students interested in education be encouraged to investigate the challenges available in teaching in culturally deprived areas; teachers who were in training were to have a background in sociology and allied areas as well as actual experience in schools located in disadvantaged neighbourhoods. He envisaged an in-service training program for teachers who were already placed in these schools. These suggestions he felt were essential for adequate preparation of teachers who must develop positive approaches to teaching in a different normative system. Bloom, Davis and Hess (1965) stated that research on teachers' attitudes toward culturally disadvantaged children generally show more negative evaluations of these children than of middle class ones. His findings substantiate the findings of Wax (1964: 59) who argued that Indian children seemed to accept value judgements of being "backward, ignorant, filthy."

As they see it, Indians who encounter Whites are always doing "awful things" like dressing oddly, eating with their fingers, or making mistakes" in English. And, in consequence, White people must spend much of their time "making fun of" (ridiculing) or "looking down" on Indians.

He further stated that even the modern school buildings create a gulf between the Indian's home and his school environment. As a result educators induce shame and hostility instead of incentives for improved quality of education.

From this brief survey of normative structures of the subculture of poverty, it is appropriate to move on to a consideration of how such structures determine goal

orientations in similar social milieux.

Goals

Whenever human beings form groups and engage in social projects they direct their projects towards certain goals which may be fulfilled to a greater or lesser extent. Since all human activity is by its very nature social in origin it is important to understand the collective character of human goals even though they are sought after and realized by individuals. If this characterization holds true for human society on an abstract level, how much truer it is for all historically concrete societies whose universalized and general goal consensus tends in practice to be replaced by the conflicting goals of competing interest groups and social classes.

In a study on poverty and education, such as this, one of the crucial things to examine is the nature of goal orientation amongst the poor and the way in which it differs from middle class aspirations. For a knowledge of consciously expressed goals is an indispensable to an understanding of the social and economic structure of communities, as the social and economic structure is indispensable to an understanding of consciously expressed goals. In other words, they reciprocally affect each other.

Individual goals are evidently determined by a complex of social relationships. In this discussion greatest attention has been paid to the socio-economic status of people

and the ways in which this status is expressed in both the form and content of goal aspirations. Of course, many other factors besides socio-economic status combine to influence goal orientations, the obvious ones being nationality, regional background (rural or urban), age, sex. However, this literature review is limited to school-age children whose goal orientations here have been related to their social class background.

Crockett (1964) for example, presents some fairly conventional data to show that college training exerts a powerful influence on inter-generational mobility from all social class backgrounds. However, not all mobility could be attributed to college training and for individuals without higher education an achievement-motive factor was proposed to explain social mobility. Somewhat in contrast to this view of individualized achievement motivation, Turner (1964) emphasizes the importance of class-subcultures as generating milieux of different forms of class-consciousness. In this case, achievement motivation is not seen as an individualized and random factor, but rather as a system of responses to particular styles of anticipatory socialization and social practice.

This interpretation of goal orientation amongst children was also supported by another study carried out by Sugarman (1966:287-302). The data extracted from this research showed plainly that the social class background of school

children was significantly related to their future orientations although not to other selected values. The ratings on future-orientations were also positively related to academic performance within the school. Needless to say, the lower class children showed a significant lack of future orientations, a phenomenon that Oscar Lewis, among others, has observed.

In another study Kuvlesky (1968:141-152) found that both rural and urban Negro boys from Texas maintained generally high level goals and expectations; but the urban boys had higher goal and expectation levels than rural boys. Rural-urban differences were found to be greater for goals than for expectations, while rural and urban respondents seemed to have experienced very similar rates of anticipatory deflection from occupational goals; and differences were observed in reference to the nature of anticipatory deflection experienced. Because a high population of urban poor are recent immigrants from rural communities, studies such as the above on comparative goal-orientations are very important.

In another study Meade (1968:169-173) in two experiments with 40 Indian and 40 American college students compared goal discrepancy scores and found that in both studies less realistic aspiration levels were indicated for the Indians who were from poor families. In yet another study Nelson (1968) using 886 six-year old underprivileged negro boys and girls entering their first year of school in Nashville,

Tennessee, and living in depressed city areas with parents of low educational background, and negro middle class children compared them with both underprivileged and middle class white children. He found that remarkable consistency on some wish choices were maintained by all negro boys and girls. The advantaged negro group showed a strong tendency toward upward mobility while only 6.3% of the disadvantaged negroes and not a single white disadvantaged or advantaged child showed this tendency. There are, therefore, important factors related to minority group status that also determine aspects of goal orientation.

Conclusion

In conclusion it was seen that normative systems appear to operate on different levels both on a particular and on a general scale. In the micro-system of the class-room for example, the learning objective is greatly facilitated by the careful preparation of an appropriate emotional as well as intellectual climate. This leads to teaching practice which will be developed in a later chapter.

On a larger scale the macro-system of larger communication networks has developed an adolescent subculture which directly influences the values and aspirations in the class-room. In view of these often conflicting sources of expectation of the child's performance in the class-room the ideal of education for creative liberation becomes difficult, if not impossible to be realized.

CHAPTER IV

PROJECT ANALYSIS

PERSONALITY AND EDUCATION WITHIN

THE POVERTY MATRIX

Introduction

A survey of a selective volume of data from each of the main analytic areas of this general discussion has already been made. The most important task is to organize these data and to extract from them meanings that are relevant to the framework of our study. In relating the theories of Oscar Lewis and Talcott Parsons through the analysis of different systems of action (Personality, social and cultural), one of the underlying characteristics of this approach may be emphasized in the openness of these systems. This is to say, that neither the personality, nor the social systems can be adequately treated in analytic isolation, for the very operation of these systems may only be understood in terms of a reciprocal interaction with each other; how, in fact, aspects of a total reality are selectively mapped on to different experiential scales. This is, indeed an interesting ontological and epistemological question and one that we have little mandate to explore here, but in terms of relationship of the personality and the socio-cultural system

it can be posed as the problem of projecting outside what is on the inside, or correspondingly, introjecting inside what is on the outside and this question for our purposes must be continuously posed within the context of the educational system.

Intelligence Factor

From a review of much of the research data on the first of our personality variables (intelligence), it is evident that a clear division exists within the traditional literature between an acknowledgement of hereditary determinants on the one hand and environmental determinants of educability on the other hand. It is from one or other of these two sides of an established dichotomy that much, if not most, research literature has derived its experimental design and its conclusions. The hereditary tradition is well represented in the series of studies from Burt, Eysenck, Cattell and Jensen among others, who nominally endorse the existence of environmental variables but in practice emphasize the basic dominance of genetic determinants of both behaviour and educability. Similarly some sociologists and social psychologists including Faris (1961) and Clark (1963) have tended to neglect the biological basis of behaviour in their exclusive or near-exclusive concentration on the social determinants of human action. An excellent corrective to this form of sociologism is offered by Eckland (1967:173). For the educationalists the resultant dilemma at being

confronted by these two academic traditions is obvious. The practical implications that flow from each alternative solution appear irreconcilable.

On the one hand it is possible to cite references that state the genetic basis of "intelligence" and/or educability to be as high as 80% (Jensen 1969:1-123) or thereabouts, whilst other more environmentally disposed researchers put this percentage at a much lower figure. A classic instance of such a confrontation is seen in the response of the "Society for the Study of Psychological Issues", to the original paper by Jensen on "How Much Can we Boost IQ and Scholastic Achievement", published in the 1969 issue of the Harvard review. Of what interest to the educationalist are these theoretical debates? There is evidently one important problem contained in these exchanges and that is, the scope of different disciplines to adequately explain these phenomena. If, for example, there was consensus on the theory that 80% of "intelligence" was inherited that would leave only 20% of the phenomenon to be explained through environmental variables. Therefore, in subsequent studies on the environmental determinants of intelligence, any literature claiming to account for example 70% of the variance in these factors, could, in fact, only make the claim to account for 70% of the available 20%, bearing in mind that 80% of the total variance was not in question. In other words, what is at stake among other things in these debates, is the relative

scope of different disciplines to explain degrees of total variance in the nature of the observed phenomena, whether intelligence, educability or whatever.

To many psychologists, for example, J. McVicker Hunt (1969:12-22), the meaning of this kind of debate has become increasingly obsolescent and there are imminent tendencies to supercede it.

Educationists must also recognize these advances in theories of development and be prepared to incorporate their new conclusions into a fresh application of teaching methods. For our purposes, it may be said, that the weakness of the traditional "nature vs nurture" debate lies in the limiting concept of closed systems, which has been implicit in the argument. The biological system and the environmental system should not be studied as though they were independent forms of organization; they should be recognized for what they are: open systems involved in a continuous developmental process of information and energy exchange between them. In this sense much of the research conducted to date, whether on environmental or biological determinants of education performance must be regarded as strictly preparatory in nature, insomuch as they have served to indicate the static relationships between these different levels of organization. What remains to be done with equal rigour is a systematic exploration into the ways in which these different levels of organization dynamically and cybernetically

act upon one another. How do biological systems themselves selectively map into their developmental aspects of the environing reality, and how does this systematic exchange generate further changes in the nature of the environment? It would appear, therefore, that there are at least three broad conditioning components to educational achievement in any situation:

Heredity (H)

Environment (E)

Heredity in relationship to Environment (HxE)

The first two factors have both received wide attention in the literature on educability, whilst the third factor has scarcely been defined an independent variable. An important, and relatively underemphasized breakthrough in this area, has been the work of geneticist Walter Johannsen (1913) as cited by Jennings (1916:407-409) and Ackert (1916:389-405), on the crucial role of the interaction of the genotype (the constellation of genes received by an organism from its progenitors) with the environment in determining the phenotype (the observable characteristics of an organism). At present it seems as though the 'nature-nurture' debate has evolved from an academic into a political division and it is a division that may well be rendered obsolescent by progressive research into the forms of combination rather than the forms of opposition inherent in these levels of organization.

Self-Conception

Besides the importance of "intelligence" in personality theory, there has also grown up an increasing literature on the significance of the self-concept for human-behaviour. Whereas much of the work on intelligence has been conducted by genetical and statistical psychologists, exploration into self-concept formation have been largely pioneered by social psychologists and sociologists.

In some ways, experiments manipulating selected aspects of individual and/or group self-conceptions have proven important empirical correctives to the several shortcomings in the methodology of intelligence and general aptitude testing. For example, a famous study by Katz (1968) showed that in manipulating the racial status of the administrator of aptitude tests, and also in manipulating the stressful content in these tests, significant differences in aggregate test scores could be obtained among negro subjects. Katz concluded that the prevailing self-conception among negroes was liable to act as an intervening variable in test situations administered by white experimenters.

It is through such revealing studies that some indication is given of the powerful effects that attitudes and primarily attitudes related to self-conception, can exert upon an otherwise controlled test situation. Katz's (op. cit.) significant findings included basic perceptual and motivational variables which in the appropriate setting

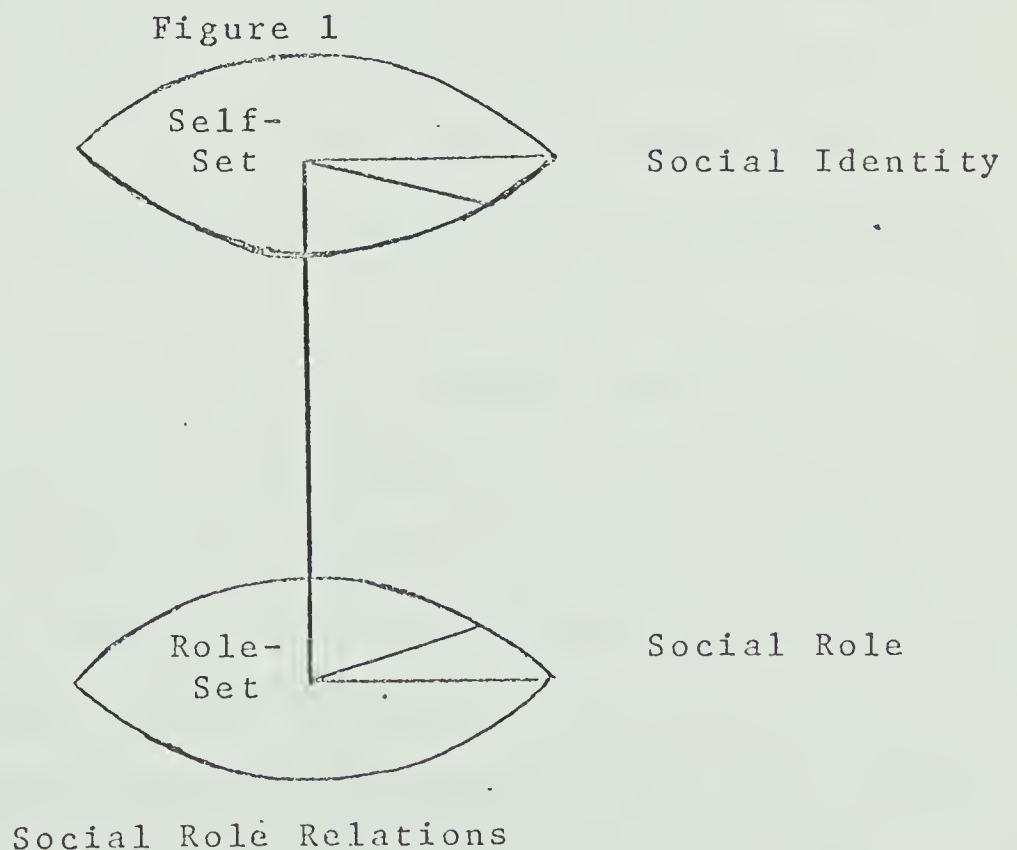
(i.e. with a white experimenter administering I.Q. tests) militated against the reliability of these tests in the production of a genuine estimate of general aptitude. It is noteworthy that many of the classic studies on I.Q. testing of different ethnic subpopulation groups, (Arlitt 1921, Jensen 1969), neglect to specify the interpersonal conditions of the experimental situation, and this omission combined with the doctrine of a biological basis of intelligence has paved the way for further misunderstanding in this field.

It is predictable that the tendencies observed in the above experiments, for the self-concept as a racial variable to operate independently of the test situation (i.e. as determined by structural relationships outside of the laboratory), may reproduce themselves as social class variables in similar experimental settings. Although significant correlations have been reported between positive self-conceptions and successful academic performance (Sylvester and Kunst 1943; Lecky, 1945) very little research has attempted to understand the nature of the self-conception in sociological terms.

As outlined in the previous chapter there appears to exist a rupture, or discontinuity, in the literature on self-conception between the theoretical foundations laid down originally by Cooley, Mead, and others, on the one hand, and the great mass of empirical studies on the other. There is an absence of "theories of the middle range,"

(Merton 1957) which are needed to link up low-level generalizations with appropriate empirical data. What has, in fact, been missing is an operationalized model of self-conception, one, which besides being quantifiable, is also theoretically advanced enough to raise questions of a practical significance.

Some progress in this direction has come recently from theorists in the area of symbolic interactional research who have made systematic attempts to relate the structure of the self-conception to the structure of human action, as exemplified in the works of Sarbin and Stryker. The diagrammatic representation which follows should serve to further explain the self-concept formation which is based in large part on works of these two theorists.



Adapted from Dr. Fearn's Blackboard Diagram (Sociology 440,
University of Alberta)

As has been previously stated, the structure of the self-concept is grounded in the structure of social role relationships. The totality of self-concept relations may be called the self-set and the totality of social relations may be called the role-set (Merton, 1957). From the general form of the role-set can be perceived individual social roles, which may be institutionalized into a legitimate network of collective behaviour (e.g. social welfare recipient, parent, tenant), or may just as easily remain non-institutionalized (e.g. truant, delinquent). However, it is often the case that non-institutionalized behaviour performs important social functions in poverty areas, and rather than being classed as deviant, may be better understood as adaptive responses to the contradictions between a restrictive micro-socio-economic system and an incentive macro-cultural system. There is, therefore, an immediate relationship between the generation of behaviour (through social role engagement) and the generation of experience (through social identity formation).

There is, also a dynamic correspondence between the self-structure manifested as an hierarchy of identities through attitudinal tests, and the role structure, which may be extrapolated from the network of actual social relationships in the world. Apart from the formulation of this model, however, there appears to have been remarkably little empirical research to extend the scope of its use. The

opportunities for this kind of research have until now been studied in the small group setting, although there are evidently applications to be made in the area of family research. Such possibilities include natural longitudinal studies of married couples, before and after the birth of the first child. In this context it may well be possible to measure the expansion in self-concept formulation which accompanies the engagement in the new`role relationships involved in parenthood. Similarly studies on retirement may well explore the relations between disengagement from work-roles and a correspondent contraction in the self-conception.

For the purposes of this study it is necessary to examine the nature of role relationships under conditions of poverty in order to understand the scope and form of the self-conceptions of children who derive from these environments. The importance of the social psychological variables cannot easily be overestimated, for the way a child evaluates himself relative to others, whether consciously or not, can be a powerful incentive to learning just as it can be an effective inhibition. W. I. Thomas (1951 p. 81) was essentially correct in his remark: "if men define situation as real they are real in their consequences". If the implications of symbolic interactional theory are correct, therefore, it is no longer of any use simply to think in terms of modifying a negative self-concept through therapy or

psychological reorientation; it is also necessary to transform the institutionalized role-relationships that characterize and reinforce these self-evaluations. It is for these reasons that we shall isolate the self-concept and go on to discuss in the final chapter the implications of the self-role concept as an appropriate frame of reference for the understanding of human behaviour in the poverty matrix.

It has been intimated that personality characteristics are subject to multiple determinations, partly biological, partly socio-cultural, and also partly interactive between these major organizational systems. It is now appropriate to consider these factors as they operate in the social context of poverty.

SOCIETY AND EDUCATION WITHIN THE POVERTY MATRIX

Introduction

The social and economic definitions of poverty are liable to be of two basic types: deprivational definitions, or inequality definitions. Deprivational definitions are based on a conception of poverty as a state in which essential goods and services cannot be purchased. In any given society, the cost of a minimum standard of living can be specified and these costs will determine the poverty lines for that society. The most common method of operationalizing deprivational measures of poverty has been through the

estimation of minimum family budgets, and a corresponding survey of the distribution of families living on or below this financial level. On the other hand, inequality definitions of poverty are based on the assumption that poverty is a relative thing, which cannot be considered apart from the society in which it occurs. Since this is the case, the extent of poverty should not be measured against a standard of living scale, but should rather be integrated in terms of the distribution of wealth within a society. Accordingly, this definition of poverty tends to be measured in gross statistical terms; often the proportion of income received by the top social percentage is compared to that received by the bottom social percentage in a particular population.

These two conceptions of poverty were recognized by the Economic Council of Canada in its fifth review (1968), as poverty defined in the following manner:

In developed industrial societies the problem of poverty is increasingly viewed, not as sheer lack of essentials to sustain life, but as insufficient access to certain goods, services and conditions of life which are available to everyone else and have come to be accepted as basic to a decent minimum standard of living.

Socio-Economics (Occupation and Income)

For the purposes of this study the multiple social problems associated with poverty in modern societies are only relevant to the extent that they reproduce themselves within the educational system on the one hand, and through their

continuous operation result in a restructuring of educational goals and methods on the other. Inasmuch as these contradictory factors cannot be dismissed as random by-products of the larger social system, it is necessary to explore the systematic relationships that exist between poverty and educational performance, and to formalize these relationships in terms of a poverty matrix. From this starting point one of the important questions implicit in this section is the nature of the relationship between behaviour and experience (Liebow 1967). For it is evident that the poor do not behave in the same fashion as their middle class counterparts. Oscar Lewis (1966 pp.xlv-xlvii) provides four such differences.

1. Lack of effective participation and integration of the poor in the major institutions of the larger society.
2. Minimum of organization beyond the level of the nuclear and extended family.
3. Internal differences in family organization such as the absence of childhood as a specially prolonged and protected stage of the life-cycle.
4. On the level of the individual the major characteristics are a strong feeling of marginality, of helplessness, of dependence, and of inferiority.

It is of great significance to the educationalist therefore, to reach an understanding of the relationships that stand between the behaviour of the poor and the way that they experience this behaviour. In working out this

relationship a central debate has arisen within the recent theoretical literature on poverty and has revolved around the concept of the "culture of poverty", particularly in reference to its causal status. On the one hand many of the theorists on the "culture of poverty" (Lewis 1966, Reissman 1962, Harrington 1962) have emphasized the normative character, as a major concern with what is held to be the socially transmitted 'culture of poverty' from the older generation. On the other hand, however, an increasing number of social scientists have challenged this normative approach, and have emphasized in its place the dominance of sub-social, or infrastructural variables. The proponents of this view (Roach and Yursslin, 1970, Liebow 1967, Schorr 1964) insist that the social psychological expressions of poverty are largely epi-phenominal, understandable only by reference to the controlling material deprivations.

Rather than enter a sterile argument on the direction of causal factors in the poverty system, it is more interesting to reveal the interaction between material and psychological phenomena, the way they reinforce and feedback into each other. For the purposes of understanding the functions of poverty in the education system or the function of education within the poverty matrix, it is precisely this link between the behaviour and experience of the poor that could, at present, provide a most useful insight.

Reference Groups

The importance of reference groups as a concept in social system analysis lies in its use for explaining (or describing) symbolic sources of motivation for any population group. Most of us have reference groups of some description that serve to orient our aspirations and structure our behaviour towards selected material and symbolic goals. An interesting project would be to survey the different types of reference groups (positive and negative) that are thrown up in different ecological conditions under different levels of social organization. The educational application for this kind of data are immediate and far reaching.

Walter Miller (1958:5-19) suggests that lower class culture may be seen as a "generating milieu" of gang delinquency, which stresses certain values such as toughness, smartness, excitement and so forth. It is these values that frequently characterize the attitudes of lower class children and separate them ideologically from their middle-class counterparts. But it is important to remember that these values do not develop in a random fashion but are systematically generated by conditions found within the impoverished environments. Hence the values of toughness, smartness, etc. may be seen as commitments to social mobility conditioned, however, by the relative absence of opportunity structures away from more conventional (i.e., middle class) forms of achievement.

In this context we can understand Turner's (1955) correlation between future-oriented behaviour and upper-class (college) men as more than a simple ideological distinction. For as Lewis (1966:xlvi) suggests there are social and material factors such as low wages, absence of savings, absence of food reserves in the home, which effectively militate against the expression of deferred gratification as a realistic mode of behaviour in lower-class environments.

Perhaps an even more important factor may be seen in the normal range of role-relationships that low-class members exhibit with middle-class members. It is evident that for children from low-class backgrounds a large number of significant contacts with the middle-class world are made from a state of relative powerlessness. The middle-class symbol thus is easily transformed into a symbol of authority (e.g., the social welfare worker, policemen, clergymen, politicians, etc.).

It is this type of prior socialization into class relations that can inhibit the pupil-teacher rapport in low-class schools (which are increasingly stocked with middle class teachers); it is, in this sense, an exclusively class phenomenon. Allison Davis (1948:10) among others has recognized the communication problems that results from structured class antagonisms of this kind, Malmad (1966) points in the same direction in his analysis of inadequate teaching methods and underprivileged children.

The problem, to some extent, would seem to be that of substituting the teaching profession as a reference group, or as a means to socially desirable values: to education, in the place of lower-class reference groups. In view of the social and ecological realities which reinforces lower-class experience and behaviour, it evidently requires much more than a simple change of attitude. It requires as Davis (1948) suggests a transformation in teaching practice, but this will be more carefully considered in the next chapter.

CULTURE AND EDUCATION WITHIN THE POVERTY MATRIX (NORMS AND GOALS)

One of the significant questions related to the structure of normative systems is that of identifying the sources of goals and of the socially prescribed means of achieving them. For it presupposes that in areas of impoverished environments there are important contradictory forces at work. It may be assumed that the successful future in teaching practice in these areas depends upon a new understanding of these social contradictions.

As Marshall McLuhan (1967) has shown, the network of mass communication media exert considerable pressure on the goals and normative aspirations of increasing numbers of people. The symbols produced by these media penetrate into the "culture of poverty". Yet as Liebow has also shown, although the goals and norms of dominant institutions are recognized by the poor, they cannot be actualized, at least

not in the conventional ways. There is then a contradiction between what the poor are told is possible and desirable, and what they know is possible. It is this impasse that creates the three basic alternatives that can be empirically observed in poor populations:

1. A rejection of the validity of socially projected goals in the face of personal situation and experience.
2. A rejection of personal validity in the face of failure according to socially defined criteria.
3. A rejection of the validity of the norms which prescribe ways by which these goals are to be achieved.

Kuvlesky's study mentioned above can be interpreted with this analysis:

The problem of teaching lies in the demoralized consciousness of poor people, generated by the second alternative, where the problems of poverty become obscured into the problems with people.

Summary

The objective of this theoretical approach, is therefore, as already indicated to show an application of action theory within the particular sets of human relationships that generate and reinforce poverty.

On the one hand this approach has been practised by examining each of the systems of action, and their components, in terms of their relative status under conditions of poverty. For this reason it has been necessary to define the main

theoretical and empirical issues within the research literature (e.g., intelligence: inherited or acquired) and at the same time to relate them to the ongoing problems by the conditions of poverty. In this sense the culture of poverty forms the parameters of a matrix, inside of which, the various systems of action show their relative interdependencies in concrete and empirical examples.

On the other hand an elaboration of the poverty matrix has a relevance in this study, only inasmuch as it advances an understanding of the components of educability under conditions of poverty. For it has already been noted, that the specialized instructional program which exist in societies of universal education, rarely have an application for environmentally deprived children. On the contrary, such programs generally make provisions for other forms of handicap, mental, physical or socio-emotional but do not cater for the particular needs of children whose handicaps are rooted in their basic social conditions of existence. Coleman's report and E.S.E.A. referred to in Chapter One above, have outlined efforts recently made towards helping environmentally deprived children. According to Jensen (1961:1), however, these programs have failed. It is suggested that unless efforts are made to understand the problems of the poor, mere enrichment programs will never suffice. For the above reasons, an understanding of the poverty matrix suggests both a critique and a supercession of the distributive institutions of universal education.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS

The purpose of this chapter is to present a summary of the foregoing discussion, as well as conclusions and implications for future study, and a series of recommendations based on the above observations. These recommendations will be designed to secure improved teaching practice in areas of poverty and socio-cultural deprivation.

Summary

The intention of the study has been to provide a theoretical understanding of the way in which specific poverty areas may be regarded as adaptive Social Systems, each with a range of elements that combine to maintain the structure of the complete system. These elements have been expressed as subsystems and their ongoing operations may be seen as open and subject to reciprocal interaction. In this way the structure of poverty has been understood through systematic and non-random relationships which directly reproduce themselves from the neighbourhood into the schoolroom. The importance of understanding the reinforcing mechanisms of poverty is evidently great for those educationalists who practise in impoverished social and economic areas. Failure to take into consideration the range of conditioning variables

in the problems of academic achievement in lower class learning contexts, has traditionally lead to oversimplified conclusions and partial remedies. For this reason, our theoretical treatment of poverty has been highly explicit in terms of defining a poverty matrix, and this procedure is justified not for its ultimate validity but rather for its short term heuristic value.

Conclusions

In formulating what seem to be the central conclusions of this project we shall return to the three main research questions posed at the outset of the study, and around which much of the following data was organized:

1. What are the components of educational achievement within the lower-class learning context?
2. Are there any systematic relationships in the components of achievement directly derived from social class levels?
3. Are there programs that might be considered for the environmentally deprived?

Answers to the last of the three questions have been attempted in another section on recommendations, and it is these practical formulations that have developed from the foregoing theoretical analysis. In view of the expansive nature of the literature survey and related discussions it is inevitable that the final form of these conclusions should be broad and generalized.

1. Although the educability of children is limited by both their genetic potential and their general environmental conditions, there appears to be a wide variation in educability between these two limits. An important amount of this variation may be explained through understanding the structure and the function of the self-concept as it mediates between inherited characteristics (genetic) and acquired characteristics (environment).
2. Because the self-concept is developed through the process of learning to perform new social roles, it also follows that many social roles will take on different meanings for different social classes or subcultures. In this sense class relationships may have a continuous and long term impact on the nature of the self-concept.
3. There is therefore a continuous relationship between levels of educability and levels of socio-economic status.

The significance of the self-concept, for us, may be seen in the specific forms of determinations which enter into, and emerge from the self-structure in the on-going process of social interaction. In this sense, the self is both a response to the structures and socializations of poverty, and a stimulus to the continuing identification with these institutions. What is, perhaps of supreme importance is the mediatory status of the self-concept, the organism which stands between the stimulus and the response. Recognition of this fact is a recognition that human behaviour is never

totally programmed, and always retains some flexibility of choice or selection. In other words, once they are understood, the conditioning stimuli from poverty areas need no longer reproduce their automatic responses in the school system. They can be mediated and redefined in a number of specific ways, later to be elaborated. But at the same time, if novel responses in the educational systems of poverty areas are to be sustained, they must inevitably be reinforced by material transformations in the ecology and social organization of poverty.

Because the self-structure of people, especially of children, is more plastic than either their genealogy or material conditions of existence, it seems a natural starting point for any developed theory of learning--teaching. In many ways, however, the importance of the self-concept has been neglected for traditional-learning theory, largely because the concept itself has remained philosophical in nature and remote from concrete social practice. The structure of the self-formation has apparently resisted scientific enquiry and has defied explanation in terms of an operative social-psychological model. It is in pursuit of this ideal that the following explanation of self-formation is further elaborated, based in large part on the works of Sarbin (1968) and Stryker (1968).

Implications for Future Theory

A diagrammatic representation of the following theoretical

statement may be seen in Figure 1 to this paper. The essentials of this general model have already been touched upon in the conclusion to the section on self-conception.

At this stage of the exploration into the self-concept formation it only seems plausible to consider variations in the complexity of self-set, that is, differences of degree. Differences of a qualitative nature presume another dimension of measurement which is excluded from present consideration. As a general hypothesis we may suppose that the greater the variation in social role engagement (measurable formally through membership enrolment; informally through interaction patterns), the more complex will be the organization of the self-set (measurable through attitudinal and personality tests, projection techniques and Q.-Sorts). The relationship between complex self-sets and increased educability remains, at present, an hypothetical relationship, but it is one that can be made operative and subject to experimental varification.

A second general hypothesis that suggests itself from this theoretical framework relates to the development nature of the self-set in an advancing age-cycle. It is suggested that there should be a curvelinear relationship between the complexity of self-set and increasing age (Appendix C). This is for the primary reasons that institutionalized social role disengagement takes place at 65 years of age from occupational and associated social roles. Therefore, in theoretical terms,

we may expect a consequential contraction in self-set around the age of retirement, a contraction that may be measured in projective terms.

The possible application of this conceptual model for teaching practice at different social class levels remains to be explored by further researchers in this field. However, the form that future research will take, will hopefully include studies detailing the differential role--sets of children from middle-class and from lower-class home backgrounds. It is on this empirical base that further explorations into the nature of self-sets conducted through social-class criteria may acquire a more rigorous and systematic treatment.

Recommendations

In concluding the survey on the status of education in the poverty matrix a series of recommendations can be made with a view to improving the effectiveness of teaching practice in poverty areas. The specific form of these recommendations emphasize the importance of mediating the social relations between school systems and community systems at those points where the contradictions are most apparent. In this way we may consciously structure the educational programs for poverty areas in much the same way as other educational programs are structured to the needs of physically or mentally handicapped children, discussed at the beginning of this project. In this sense education in these

areas must become poverty specific.

It is evident that several qualifications should precede a discussion of these recommendations. Most important is a recognition that substantial educational reforms in poverty areas may only prove successful if they form part of more comprehensive policy of community development. For, by themselves, educational reforms will remain artificial developments unsupported by the local institutions of neighbourhood and community life. A second point related to this problem is the need to recognize that poverty areas, or slums in general, although visibly deprived of many middle-class goals and services frequently display a highly organized community structure. They do not inevitably exist in chronic states of social disorganization, as many more middle-class commentators have mistakenly implied. In fact some of the older ethnic ghettos in the United States have provided highly organized resistance to governmental proposals for urban renewal projects and housing relocation programs as suggested above by Gans, Sexton and Jacobs.

With these qualifications in mind we shall present the general form of our recommendations and conclude by discussing the specific applications in each case. We have four major recommendations to make, relating to:

1. Teacher residence
2. Teacher aides
3. Pupil teachers
4. Extra facilities

Teacher Residence

The first proposal is designed to encourage professional teachers practising in poverty areas to settle and make their homes in these communities as is suggested by Kvaraceus in the literature survey. Too often, it seems that the teaching profession constitutes yet another part of the mobile middle-class traffic that daily enters lower-class areas to administer poor people, and then retreats at the end of the day into suburban enclaves totally removed from the work location. In view of the foregoing literature it is important for the teacher to become a participant in the community in which his school is situated, and to understand that the relationships between learning and living are in many cases, determinant. For the teacher to settle in poverty areas, it is necessary that the essentially contractual relationship between the school and the community become transformed into more personalized and human connections. In this respect, teachers in poverty areas still have much to learn from the ethnographic studies of urban anthropologists and sociologists who have collected much of their field data through participant observation. The teacher, too, must become a participant observer if he is to overcome the social and normative barriers between himself and his students.

On a more general level the importance of teacher residence in poverty areas may also be justified by the need to develop community resources in such areas as professional

skills. Emphasis has been made above by writers such as Jacobs and Sexton of the beneficial effects of skilled manpower investments in poor communities, in terms of providing community leadership and paving the way for a general mobilization of local people. An increased settlement in poverty areas by professionals creates, among other things, the possibilities for an expanded tax base, which in turn broadens the range of available social services. This type of rational manpower and resource development may, if programmed effectively, create the necessary conditions for the gradual transformation of slums into areas of stable residence and employment.

Teacher-aides

There is a considerable literature on the use of teacher-aides including those mentioned above by Ostroviak, Hillenbrand, Leonard, Frank, although most of these studies have been researched in middle-class school systems. Our proposal is to encourage a program of systematic recruitment of teacher-aides from the parents and relatives of children attending schools in impoverished communities. Assignment of duties in these cases would naturally be commensurate with practical qualifications, such as limited supervising tasks related to meal-time invigilation or play-ground monitorship, as well as secretarial work for some more fully trained parents or relatives. The importance of teacher-

aides in poverty areas may be seen not only in the reduction of non-academic workloads of teachers, but also in the participative roles that can be created for parents in the school system. On the one hand, this parental involvement in the education system may lead to a greater parental identification with the school, that is, a greater acceptance of educational values within the home environment. On the other hand, such limited duties may provide welcome supplementary incomes to many family budgets. Hillenbrand above has convincingly shown how parental association with a school system can provide an important extension to the formal resources located within the school. Again it is proposed, that the use of local teacher-aides in impoverished school districts may help to heal the rupture between the consciousness and values of the teaching profession, and the consciousness and values of the community.

Pupil-Teachers

The third recommendation is a proposal to incorporate (experimentally, at first) a teaching approach which has traditionally been used in the Caribbean educational system, i.e., pupil-teachers.

The advantages of employing pupil-teachers in the classroom situation are in large part related to the improved communication and rapport in the learning-teaching relationships. Language and age differences are also minimized between pupil teacher and student, and the learning process

is often stripped of its more authoritarian and intimidating characteristics.

The application of this institution to schools in poverty areas would seem to be several in number. Importantly, it would serve to reduce the status contradictions between students and teachers in the learning situation. More than this, however, it would also develop a preparatory base for the recruitment and training of local people into the teaching profession. It may well be that such indigenous teachers are the most potent educational reference groups operating in impoverished communities. What needs to be carefully worked out are the specific forms of accreditation appropriate to pupil-teacher experience in the high-school systems.

Extra Facilities

Our final recommendation related to the evident need for extra facilities to supplement the often inadequate daytime teaching practice in the schools. We shall select only one example of development in this area with the hope that it may illustrate possibilities for further innovations.

Many studies of home environments in poverty areas emphasize the ecological problems of overcrowding and density of occupation. Space under these conditions, becomes a scarce resource in a sense unknown for more affluent middle-class residential settlements. For children, homework and other extra-curricular preparation are often completed under severe restrictions of space and noise. Privacy is not a lower

class luxury.

The commonality of these conditions in poverty areas has created an objective need for evening centres where children can retreat to complete their homework and pursue independent study. In some areas this could be achieved through the regular night-time operation of school premises as study centres for neighborhood children. In other areas it may well be possible for community action groups, with or without the assistance of the school board, to requisition vacant houses for use as evening study centres. This facility could well be supplemented by the presence of several teachers (on a voluntary or paid basis) who make themselves available to children with problems or questions of an academic nature. For this reason evening centre could also function as a rehabilitation session for children whose daytime learning was in any way interrupted.

The realities of life in the poverty matrix make such provisions for supplementary instructional aid a rational necessity, if poor children are to enjoy equal access to the resources of education, and exploit those resources to their ultimate advantage.

Several things may be said, in conclusion, regarding the theoretical implications and the practicality of the above recommendations. The first three suggestions (re: teacher residence, teacher aides, and pupil teachers) have been inspired by an understanding of the critical importance of

correctly conditioned self-concepts to educational achievement. For although it is evident that educational achievement itself conditions positive self-concepts in students, it has been insufficiently understood that the nature of self-concept formation may also set immediate limits to educational achievement in any given situation.

Therefore the importance of teacher-residence lies in the need for teachers to come to grips with the neighbourhood communities, which define the social identities of children and operate to maintain them. Only through participating in and identifying with such local communities can educators reasonably expect to succeed in soliciting real participation and identification from their student bodies.

In the same way the importance of teacher-aides, beyond the values of reducing teachers' non-academic work-loads, stems from the possibilities for parental involvement in the school system. To some extent this recommendation is directed towards a transformation in parental self-concepts through an engagement in new social roles connected directly with the school system. It is theorized that if such a connection were to result in a greater parental acceptance of educational values, the general propensity of students to motivate and perform highly would be greatly increased.

The recommendations for pupil teachers is similarly based on the assumption that the introduction of new social roles may result in the formation of new identities among

students, which may be used to strengthen the motivational components of their educational performance. For gifted students, the institution of pupil teacher instruction provides an opportunity to divert surplus capacities towards a maximization of other students' performances instead of simply competing against them. Another utility of the pupil-teacher system is that of assisting children of different grades in solving difficulties found in the same subjects, as pointed out by Riessman above regarding reading. For other students the benefits of informal learning and reduced teaching distance have yet to be demonstrated experimentally.

There can be little doubt that the practical difficulties involved in implementing all of any of the recommendations in poverty areas will be very great. Teachers will not willingly submit to living in slums any more than they will encourage pupil-teachers to practise part of their profession for them. But there are some promising starts that have already been made in some of these areas. For example, the pupil teacher institution appears to have been tried at the St. Albert Protestant Separate School District near Edmonton, Alberta (Appendix A). Similarly, teacher-aides have been recruited from respectable middle class suburban homes, and there is no good reason why they should not also be recruited from respectable slum community homes.

The extra resources suggested in the final recommendation

will further facilitate the upgrading of educational programs as they relate to the environmentally deprived. In any event, it is predictable that the bulk of resistance to experimenting with new organizational forms of community teaching practice will not come from the people whom the teaching profession is designed to serve. It will come inevitably, from bureaucrats inside the profession, and outside of the communities they are supposed to serve.

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A P P E N D I C E S

APPENDIX A

Tutoring Project Gets Aid^a

Tutoring of younger students by older students is one of three more projects to receive financing through the \$1 million innovative project fund of the education department.

In a statement Thursday, the department said the other two projects are to encourage community use of a separate inner city school in Edmonton, and a new curriculum for Grade 10 students at Eastglen.

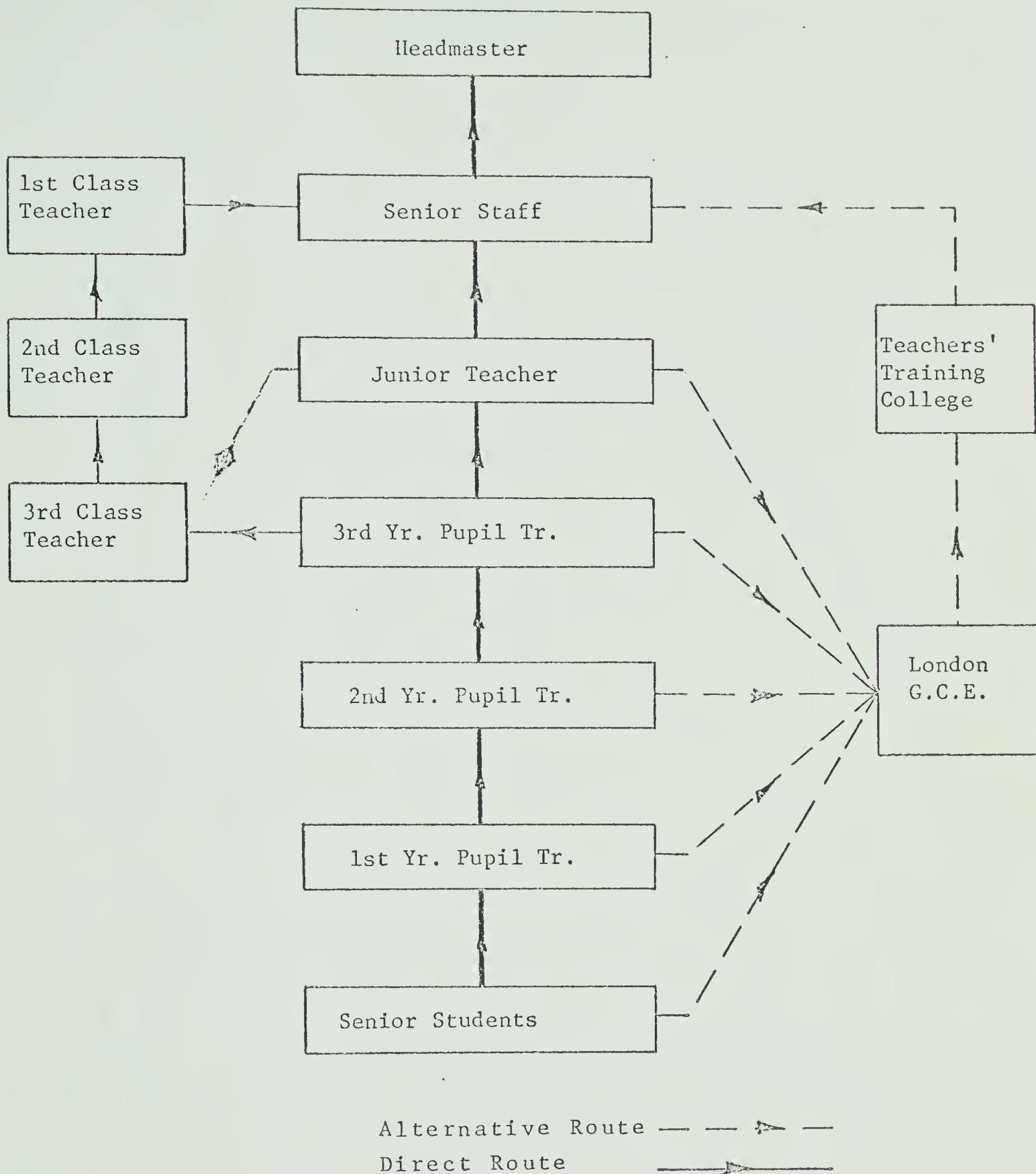
Three projects received approval of Education Minister Bob Clark in December.

The department will pay 50 per cent of projects that improve the efficiency and quality of education through the fund, announced last year.

The three latest projects approved are:

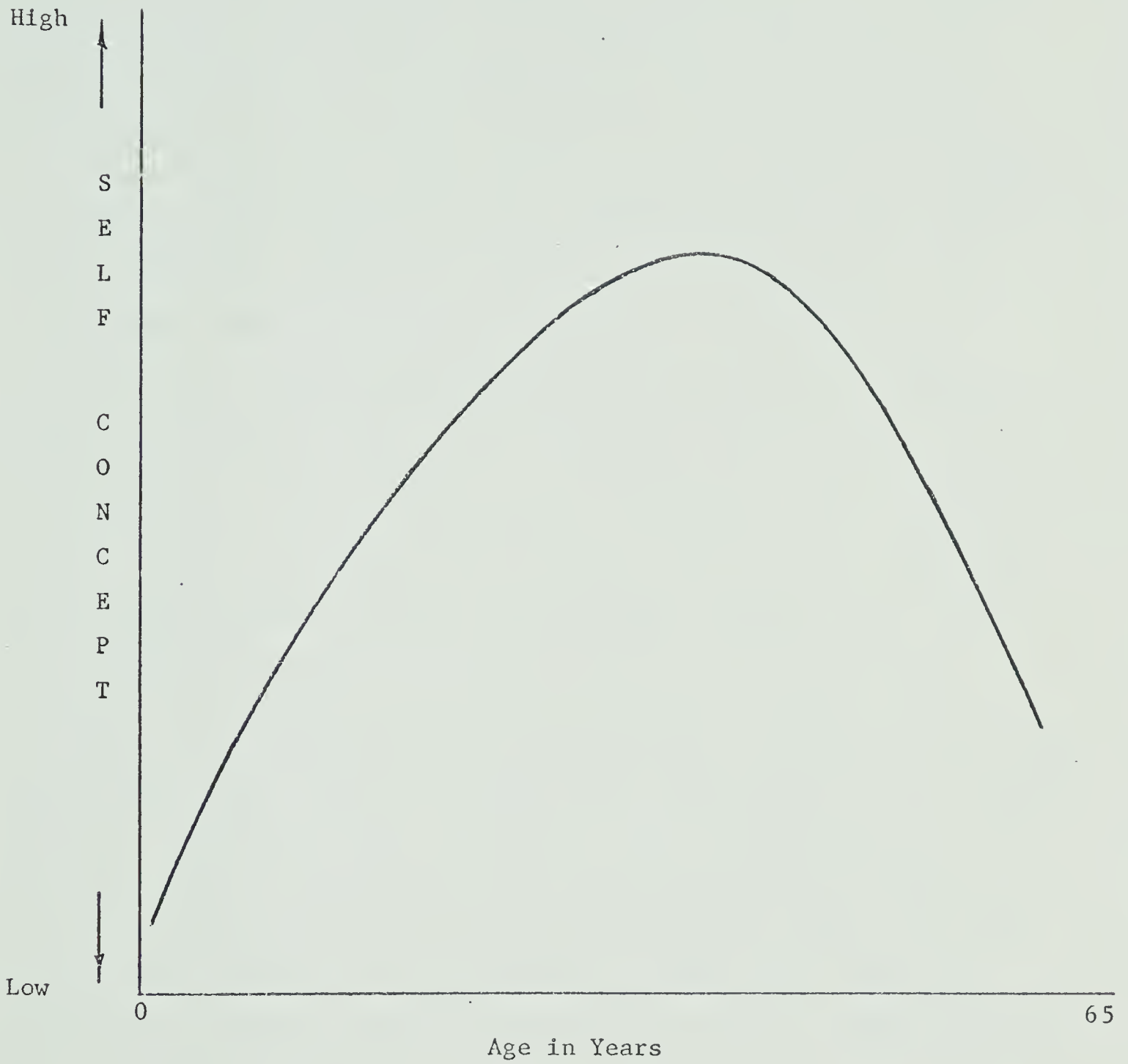
1. St. Albert Protestant Separate School District's \$3,500 cross-age helping program in which senior high and Grade 6 and 7 students will help elementary students in language-arts studies at four schools;
2. A \$70,672 community use pilot project at Sacred Heart School in the Boyle Street area where in recent years "an influx of immigrant and transient families has resulted in the development of new and difficult community patterns;
3. The \$1,450 Eastglen integrated learning project of the Edmonton public school board in which about 100 students meet under the direction of teachers of a number of subjects, then break up into discussion groups.

^aThe Edmonton Journal, March 12, 1971. p. 39.



Operation of the Pupil-Teacher System in the Caribbean.

APPENDIX C



Relationship of Age and Self-Concept
(Conceptual diagram)

The institution of the pupil-teacher consists of senior Primary School Students, known in the Caribbean as secondary school students from the "all-age" schools (i.e.: schools with children from 5 or 6 to 14 years and over), who have passed appropriate non-professional teaching examinations (of which there are three levels) and who combine a continuing high school education with responsibilities for regular class practice. There is, however, an alternative to the continuing high-school education (i.e.: after the non-professional teaching exams have been successfully taken). This alternative is the local teachers' professional class examinations, also in three levels beginning with the third class as the lowest level and going up to the 1st class as the highest level. These examinations, however, are often very difficult to pass (probably because teachers' pay increases considerably upon the successful completion of each level) and most students prefer the former high-school combination. Generally, the earliest a child can undertake this type of responsibility is around 16 years of age, and even then, such practice is restricted to the senior and most competent students who have expressed a future commitment to the teaching profession.

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